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(54) Title: INTERFERENTIAL OPTICAL FILTER

(57) Abstract: An interferential optical filter is provided comprising multiple layers each having real and/or imaginary refraction indexes. The values of the real and imaginary indexes depend on the strength of an external electric field. The material refraction indexes and the thickness of each layer and their combination are selected such as to provide an interference extremum in at least one region of the spectrum, for at least one polarization of incident light. At least one layer is made of an electro-optical material, which is anisotropic and made from at least one aromatic organic material. The molecules or fragments of molecules of the aromatic organic material have a flat structure. At least part of the layer of the electro-optical material has a crystalline structure with an intermolecular spacing of $3.4 \pm 0.3 \text{ \AA}$ along one of optical axes.



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